

CLAIMS

I/We claim:

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1. An encoder for compressing image information comprising:

a memory configured to store a sequence of characters representing an image; and

a processor configured to determine if the stored sequence of characters corresponds to one of a banded image and a page image, to operate in a first mode to encode the stored sequence of characters if the sequence of characters is determined to correspond to the banded image, and to operate in a second mode, different than the first mode, to encode the stored sequence of characters if the first sequence of characters is determined to correspond to the page image.

- 2. An encoder according to claim 1, wherein the processor is further configured to encode the stored first sequence of characters in accordance with a pack-bit compression technique in the first mode of operation and in accordance with a LZW compression technique in the second mode of operation.
- 1 3. An encoder according to claim 2, wherein:
- the processor is further configured to encode the stored first
- 3 sequence of characters in accordance with a pack-bit compression
- 4 technique in the second mode of operation.
- 1 4. An encoder according to claim 1, wherein:
- 2 if the first sequence of characters \is determined to
- 3 correspond to the page image, the processor is further configured
- 4 to determine if the stored first sequence of characters corresponds
- 5 to one of a primarily white page image and a primarily black page

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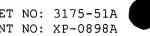
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if so, to encode the stored first sequence of 6 image, and, characters in accordance with a first compression technique while operating in the second mode of operation, and, if not, to encode the stored first sequence of characters in accordance with a second compression technique, different than the first compression

technique, while operating in the second mode of operation. 11

5. An encoder according to claim 4, wherein the first compression 1

technique is a pack-bit technique and the second compression 2

technique is a LZW *chnique. 3

6. A method for compressing image information comprising:

receiving image data representing an image;

determining if hhe received image data corresponds to one of banded image data and page image data;

encoding the received image data in accordance with a first encoding technique, if the received image data is determined to correspond to the banded image data; and

encoding the received\image data in accordance with a second encoding technique, different\than the first encoding technique, if the received image data is determined to correspond to the page image data.

- 7. A method according to claim $\setminus 6$, wherein the first encoding 1
- 2 technique is a pack-bit compression technique and the second
- encoding technique is a LZW compresston technique. 3
- 8. A method according to claim 7, further comprising: 1
- 2 encoding the received image data in\accordance with the first
- encoding technique, if the received image data is determined to 3
- correspond to the page image data. 4

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9. A method according to claim 6, wherein the image data is 1 determined to correspond to page image data, and 2 3 comprising:

determining if the received image data corresponds to one of primarily white page image data and primarily black page image data;

encoding the received\image data in accordance with the first encoding technique, if the \received image data is determined to correspond to the one of the primarily white and the primarily black page image data; and

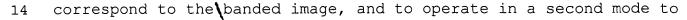
encoding the received image data in accordance with the second encoding technique, if the received image data is determined not to correspond to the one of the primarily white and the primarily black page image data.

10. A method according to claim $9, \setminus$ wherein the first encoding technique is a pack-bit technique and the second encoding technique is an LZW technique.

11. An imaging system comprising:

a raster image processor configured to determine if a sequence of characters corresponds to one of a banded image and a page image, to operate in a first mode to encode the sequence of characters if the sequence of characters \is determined to correspond to the banded image, and to operate i a second mode, different than the first mode, to encode the sequence of characters if the sequence of characters is determined to correspond to the page image; and

imager controller configured to receive \the encoded sequence of characters, and to operate in a first mode to decode the received encoded sequence of characters into the sequence of characters if the encoded sequence of characters is determined to DOCKET NO: 3175-51A CLIENT NO: XP-0898A



- decode the received encoded sequence of characters into the 15
- sequence of characters if the encoded sequence of characters is 16
- determined to correspond to the page image. 17

12. A system according to claim 10, wherein the raster image

- is further \configured to encode the sequence of processor
- 3 characters in accordance\with a pack-bit compression technique in
- the first mode of openation and in accordance with a LZW 4
- compression technique in the second mode of operation. 5
- 13. A system according to claim 12, wherein: 1
- the raster image processor is further configured to encode the 2
- sequence of characters in accordance with a pack-bit compression
- technique in the second mode of \operation.
- 14. A system according to claim 11, wherein:
- first sequence of \characters is determined to if the
- correspond to the page image, the raster image processor is further
- configured to determine if the sequence of characters corresponds
- to one of a primarily white page image and a primarily black page
- image, and, if so, to encode the sequence of characters in 6
- accordance with a first compression technique while operating in 7
- the second mode of operation, and, if not, to encode the sequence 8
- of characters in accordance with a second\compression technique, 9
- different than the first compression technique, while operating in 10
- the second mode of operation. 11
 - 15. A system according to claim 14, wherein the first compression 1
 - 2 technique is a pack-bit technique and the second compression
 - technique is a LZW technique. 3